

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Beatriz Perez Esteban et al.

Group Art Unit: tba

Serial No.: 10/524,152

Examiner: tba

Filed: February 11, 2005

For: Sequences from an Endosymbiont and Their Uses

**RESPONSE TO "NOTIFICATION OF MISSING REQUIREMENTS"**

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

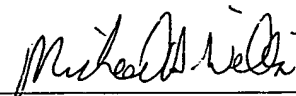
Sir:

In response to the NOTIFICATION OF MISSING REQUIREMENTS dated July 11, 2005, Applicant(s) submit(s) herewith the following documents for appropriate action by the U.S. Patent and Trademark Office:

- ☒ Copy of Notification of Missing Requirements
- ☒ Executed Declaration
- ☒ Sequence Listing (disk and paper) and Statement Under 37 CFR 1.821
- ☒ Second Supplemental Preliminary Amendment with Figures 1-7
- ☒ Please charge the required fee of \$130 to deposit account no. 13-4500, Order No. 4126-4025.
- ☐ A check in the amount of \$\_\_\_\_\_ in payment of the application filing fees is attached.
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required by this paper, or credit any overpayment to Deposit Account No. 13-4500, Order No. 4126-4025. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: August 24, 2005

By:   
Kenneth H. Sonnenfeld / Michael A. Willis  
Reg. No. 33,285 / Reg. No. 53,913

Correspondence Address:  
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(212) 415-8701 Facsimile

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Beatriz Perez Esteban et al.

Group Art Unit: tba

Serial No.: 10/524,152

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For: SEQUENCES FROM AN ENDOSYMBIONT AND THEIR USES

**EXPRESS MAIL CERTIFICATE**

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Express Mail Label No.: EV 622 483 981 US

Date of Deposit: August 24, 2005

I hereby certify that the following attached paper(s) and/or fee

1. Response to Notification of Missing Requirements (1 page + duplicate page)
2. Copy of Notification of Missing Requirements (7 pages)
3. executed Declaration (12 pages)
4. Sequence Listing (5 pages + computer disk) and Statement Under 37 CFR 1.821 (1 page)
5. Second Supplemental Amendment for Figures 1-7 (9 pages + duplicate page)
6. return postcard

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Michael A. Willis

(Typed or printed name of person mailing papers(s) and/or fee)



(Signature of person mailing paper(s) and/or fee)

Correspondence Address:

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New York, NY 10281-2101  
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(212) 415-8701 Facsimile



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/524,152	Beatriz Perez Esteban	4126-4025

INTERNATIONAL APPLICATION NO.

PCT/GB03/03538

LA. FILING DATE

PRIORITY DATE

08/13/2003

08/13/2002

27123

MORGAN & FINNEGAN, L.L.P.  
3 WORLD FINANCIAL CENTER  
NEW YORK, NY 10281-2101

CONFIRMATION NO. 1501

371 FORMALITIES LETTER

Case 4126-4025 Atty MDADue Date 9-11-05 executedExamination Date 2-11-06 by bea

am

Date Mailed: 07/11/2005

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 02/11/2005
- Copy of the International Search Report filed on 02/11/2005
- Preliminary Amendments filed on 02/11/2005
- Biochemical Sequence Diskette filed on 02/11/2005
- Oath or Declaration filed on 02/11/2005
- Biochemical Sequence Listing filed on 02/11/2005
- Request for Immediate Examination filed on 02/11/2005
- U.S. Basic National Fees filed on 02/11/2005
- Power of Attorney filed on 02/11/2005

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date. The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) in that it:
  - is not executed in accordance with either 37 CFR 1.66 or 37 CFR 1.68.
- \$130 Surcharge for providing the oath or declaration later than 30 months from the priority date (37 CFR 1.492(e)) is required.

## SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:

REVIEWED BY AUDIT DEPT.  
DATE 11/8 BY [Signature]

- **\$130** Late oath or declaration Surcharge.

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

**For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:**

- For Rules Interpretation, call (571) 272-0951
- For Patent Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patent Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

PATRICIA A BOOKER

Telephone: (703) 308-9140 EXT 204

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/524,152	PCT/GB03/03538	4126-4025

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/524,152  
Source: PCT  
Date Processed by STIC: 2-22-05

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)**
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314**

Revised 01/24/05

**BEST AVAILABLE COPY**



PCT

## RAW SEQUENCE LISTING

DATE: 02/22/2005

PATENT APPLICATION: US/10/524,152

TIME: 09:28:10

Input Set : A:\Sequence Listing 4126-4025.txt

Output Set: N:\CRF4\02222005\J524152.raw

3 <110> APPLICANT: Pharma Mar, S.A.U.  
 4 Perez Esteban, Beatriz  
 6 <120> TITLE OF INVENTION: Sequences From An Endosymbiont And Their Uses  
 8 <130> FILE REFERENCE: 4126-4025  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/524,152  
 11 <141> CURRENT FILING DATE: 2005-02-11  
 13 <150> PRIOR APPLICATION NUMBER: PCT/GB2003/003538  
 14 <151> PRIOR FILING DATE: 2003-08-13  
 16 <160> NUMBER OF SEQ ID NOS: 14  
 18 <170> SOFTWARE: PatentIn version 3.2

## ERRORED SEQUENCES

163 <210> SEQ ID NO: 9  
 164 <211> LENGTH: 20 Found 20  
 165 <212> TYPE: DNA  
 166 <213> ORGANISM: artificial  
 168 <220> FEATURE:  
 169 <223> OTHER INFORMATION: EUB8-f  
 172 <220> FEATURE:  
 173 <221> NAME/KEY: misc\_feature  
 174 <222> LOCATION: (3)..(3)  
 175 <223> OTHER INFORMATION: N is A or G  
 177 <220> FEATURE:  
 178 <221> NAME/KEY: misc\_feature  
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 180 <223> OTHER INFORMATION: N is A or C  
 182 <400> SEQUENCE: 9  
 E--> 183 agngtttgat cntgggtcag Found 21  
 204 <210> SEQ ID NO: 11  
 205 <211> LENGTH: 21  
 206 <212> TYPE: DNA  
 207 <213> ORGANISM: artificial  
 209 <220> FEATURE:  
 210 <223> OTHER INFORMATION: 16S-F1  
 213 <220> FEATURE:  
 214 <221> NAME/KEY: misc\_feature  
 215 <222> LOCATION: (5)..(5)  
 216 <223> OTHER INFORMATION: N is G or C  
 218 <220> FEATURE:  
 219 <221> NAME/KEY: misc\_feature  
 220 <222> LOCATION: (13)..(13)

See Not Compil  
 Approved Nickelia Heeder  
 (PS-1-2) 2

19-20

## RAW SEQUENCE LISTING

DATE: 02/22/2005

PATENT APPLICATION: US/10/524,152

TIME: 09:28:10

Input Set : A:\Sequence Listing 4126-4025.txt

Output Set: N:\CRF4\02222005\J524152.raw

221 &lt;223&gt; OTHER INFORMATION: N is A, C, or T

223 &lt;400&gt; SEQUENCE: 11

E--&gt; 224 gagantttga tcntggctcag

(20)-21

RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 02/22/2005

PATENT APPLICATION: US/10/524,152

TIME: 09:28:11

Input Set : A:\Sequence Listing 4126-4025.txt

Output Set: N:\CRF4\02222005\J524152.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:2,3,4,5,6,7,8,9,10,11,12,13,14



DATE: 02/22/2005

TIME: 09:28:11

Input Set : A:\Sequence Listing 4126-4025.txt

Output Set: N:\CRF4\02222005\J524152.raw

```
L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:183 M:254 E: No. of Bases conflict, LENGTH:Input:19 Counted:20 SEQ:9 ✓
L:201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:224 M:254 E: No. of Bases conflict, LENGTH:Input:20 Counted:21 SEQ:11 ✓
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The following has been found to be  
the following:

1. The following are the results of the  
analysis of the response of each component  
to the <20> fields of each sequence  
using the K&M.